

ABSTRACT

A semiconductor device which integrates a plurality of semiconductor chips into a single package includes a first semiconductor chip and a second semiconductor chip. The first semiconductor chip includes a plurality of first bonding pads outputting first signals having a first level. The second semiconductor chip includes a plurality of second bonding pads and a plurality of third bonding pads. The plurality of second bonding pads is electrically coupled to a part of the plurality of first bonding pads to receive the first signals having the first level from the first semiconductor chip through the part of the plurality of first bonding pads. The plurality of third bonding pads converts the first signals received through the plurality of second bonding pad into second signals having a second level different from the first level and outputs the second signals through the plurality of third bonding pads.